

The conditional branch has long been considered an expensive operation. The relative cost of conditional branches has increased as recently designed machines are now relying on deeper pipelines and higher multiple issue. Reducing the number of conditional branches executed can often result in a substantial performance benefit. This paper describes a code-improving transformation to reorder sequences of conditional branches. First, sequences of branches that can be reordered are detected in the c ...

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Efficient and effective branch reordering using profile data

Minghui Yang, Gang-Ryung Uh, David B. Whalley

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Keywords: Conditional branches, branch reordering, profiling

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